DOCUMENT RESUME

ED 291 188 EC 201 955

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TITLE University Programs for High Ability Adolescents.
PUB DATE Apr 87
NOTE 16p.; Paper presented at the Annual Meeting of the American Educational Research Association (Washington, DC, April 20-24, 1987).
PUB TYPE Reports - Evaluative/Feasibility (142) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Career Guidance; *College School Cooperation; *Enrichment Activities; Foreign Countries; *Gifted; *Parent Attitudes; Program Evaluation; Questionnaires; Secondary Education; Self Esteem; *Student Attitudes
IDENTIFIERS Ontario (Ottawa)

ABSTRACT

The study investigated perceptions of student participants (N=97) and their parents (N=80) in the "Mini-Course Enrichment Program," a 1-week program for gifted secondary students offered each spring by two universities in Ottawa, Canada. A questionnaire which examined the areas of achievement, career aspirations, and self-observation/personal competence was developed. Among findings were: over 95% of students and parents were satisfied with the program; 59% of students felt the program helped them in preparing for a career; 86% were proud of the work they did in the program; 66% of French speaking students (but only 37% of English speaking students) enjoyed talking in front of others; and 55% of students felt the program had a positive effect on their self-image. Parents expressed significantly different responses in several areas, e.g., need for increased guidance and counselling (parents 87%, students 72%); child's desire for more personal freedom to accomplish goals (parents 51%, students 76%). Among six recommendations for program improvement are the provision of inservice training for faculty instructors, provision of personal counseling for students, and provision of guided opportunities for self-directed learning within the courses. (DB)

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ED291188

University Programs for High Ability Adolescents

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University Programs for High Ability Adolescents

ABSTRACT

Two universities in Ottawa provide a full week of programs for bright secondary school students each spring. This study investigated factors which characterize the Mini-Course Enrichment Program as perceived by student participants and their parents. Findings were analyzed in terms of achievement, career aspirations and impact on self-image. Respondents perceived enhanced personal control, sense of risk-taking, and help in preparing for the future. Specific recommendations evolved for educators and administrators.

University Programs for High-Ability Adolescents

Two universities, University of Ottawa and Carleton University in Ottawa, Ontario provide a full week of programs on campus for bright students from local high schools. The program which has been underway for six years, attracts over 1,500 students grades 9 to 12 from 11 regional school systems in eastern Ontario and western Quebec.

The purpose of the research was to investigate the factors which characterize the Mini-Course Enrichment Program as perceived by the student participants and their parents. The data evaluated the Program in terms of achievement, self-esteem and career aspirations of the gifted learners who participated. Recommendations evolved with specific implications for educators and program administrators.

Description of the Sample

School boards are allotted approximately 3% of their student population in the relevant grades. Selection of bright students is up to each school, and includes selection by a team of teachers, selection by teachers within a department or self-nomination with teacher support. Both languages are represented in the students nominated for the program. Criteria for selection include superior ability, strong motivation, maturity, evidence of productivity, and/or evidence of a variety of extracurricular activities.

Methodology

A questionnaire was developed with items adapted from test batteries dealing in the following specific areas:

a) achievement

b) career aspirations

c) self-observation and personal competence.

A pool of one hundred items was field-tested and inter-item reliability was verified. Using Cronbach's Alpha, fifty items were selected for the instrument. It was then assessed by two faculty researchers and revisions were made. Five demographic items were added to deal with age, gender, language, year attended, and parent/student. The questionnaire was translated into French by the university translation department.

Type of Measure: 40 questions - True/False

10 questions - Likert scale with five alternatives, "strongly disagree" to "strongly agree"

Using a computer scanning sheet, answers were compiled, Chi square analysis was done for True/False items, and T-Test was done for the Likert scale choice items.

Questionnaires were distributed personally to students and parents during the 1986 Mini-Course Enrichment Program. To participants from previous years (1980 - 1985), they were mailed on a random basis. Approximately 40% of the questionnaires were returned. For breakdown, see Table 1.

TABLE 1

Number of Parents and Participants, by Gender, Language and Year Attended

STUDENTS				PARENTS
Gender	Language	Year attended		Gender
		1980-1985	1986	
Female 56	French 37	46	51	Female 58
Male 41	English 60			Male 22
Total 97				Total 80

Major Findings

As a result of the Mini-Course Enrichment Program, participants and their parents perceived several benefits relating to achievement, future visions and self-image. Certain insights dealing with learning activities and interactions were highlighted and a few differences among the independent variables were indicated.

Achievement

When broken down by all variables, over 95% of the students and their parents were satisfied with the Mini-Course Enrichment Program. They all perceived the program was successful, allowing participants to learn things that were really worthwhile. 90% of current participants (1986) felt they could use what they learned outside of school. This was somewhat lower across the years 1980 to 1985 (77%) and with the French participants (77%).

88% agreed that in the Mini-course classes they shared special interests and knowledge and 76% agreed that the program helped them to understand better what they like to do and are capable to doing. Over all, 76% of the students perceived that the group discussions encouraged them to express opinions and their differing ideas. On the latter statement there was significant difference across the years: 1986, 86% responded "True", while 1980 - 1985, only 65% responded "True"; and between languages: English, 84%: French, 64%.

48% of all respondents indicated they were unable to transfer the confidence they achieved at the program to their regular school settings afterward. This perception was verified across the years. Differences in language showed that while 71% of the English agreed or strongly agreed that the program stimulated their interest in learning more about a subject, only 53% of French students responded in this way. 55% of 1980 - 1985 respondents agreed or strongly agreed that Mini-course teachers talked with them about topics which personally interested the students, whereas only 35% of 1986 students responded in this way. Between sexes, 55% of the males answered positively on this statement, while only 35% of the females agreed or strongly agreed.

It is important to note that across all variables 87% of students stated they enjoyed finding answers for themselves, not memorizing or having teachers in the program give them the answers. 73% agreed or strongly agreed that the teachers encouraged them to find answers for themselves. In addition, 70% agreed or strongly agreed that teachers used a variety of instructional materials and activities. 87% stated they worked hard in the program because they felt what they were doing was worthwhile.

In summarizing statements relating to achievement, it appeared that learning how to learn was recognized as an important result of the Mini-Course Enrichment Program. Also, personal enrichment resulted and respondents found a positive experience which lasted across the years and built confidence in their choices for future educational experiences.

As one respondent wrote: "In my opinion the Mini-course gave an excellent introduction to university. It showed us what it was like in a particular programme or faculty and it confirmed what I wanted to do in my life. I recommend it (the Mini-Course Program) highly to all serious students".

Career Aspirations

Responses to statements dealing with the impact of the Mini-course Program on careers and the future were limited. 65% of student respondents perceived that the program helped them toward achieving their ambitions, however, only 59% felt that the program helped them in preparing for a career. It is important to note that 91% of the students felt they learned things in the program which would help them in the future both in and out of school. It appeared that global implications were perceived whereas, more specific benefits were not.

75% of the students felt that teachers did not influence them in choosing careers, while 72% of all respondents indicated they would like to get help and advice about future careers. The latter statement applied to both regular school and Mini-Course program settings. In summarizing statements relating to career aspirations, it appeared that the Mini-course clarified some potential decisions, indicated some personal needs and influenced future visions of the participants.

As one respondent stated: "The Mini-course was a very great help to me in making a career choice. It also gave me much confidence and reassurance and encouraged me to go to university".

Self-Image

In statements dealing with sense of self as a result of the Mini-Course Program, 86% of the respondents were proud of the work they did in the program. Across the years, this perception was equally high. When controlling for language, French students were higher at 94% while English students were lower at 81%. 82% perceived that making educational choices in the program helped them develop control in their life. Again the French students were somewhat higher (86%: 78%).

76% of all students felt they would like more freedom to accomplish what they "know they can", however, significant difference occurred across the years. Only 63% stated "True" from 1980 to 1985, whereas 88% responded this way in 1986. When looking at family interactions, 87% of students felt their parents appreciated and recognized their good qualities, however, again there was significant difference across the years. In 1980 - 1985, 96% "True", whereas only 80% in 1986. Similarly, 84% of all students perceived friends appreciated and recognized their good qualities, but some difference occurred across the years: 91% for 1980 - 1985, and 78% for 1986.

When viewing teacher interactions, 81% perceived that teachers appreciated and recognized their good qualities, however, there was significant difference between languages. 97% of French students responded "True", whereas only 72% of the English students stated "True" to this statement. In addition, French responses were significantly higher in the statement that teachers talked to them about areas of interest. 58% of the French agreed or strongly agreed, whereas only 36% of the English answered in this way.

It was interesting to note the significant difference between languages in that 66% of the French students felt they enjoyed talking in front of others, whereas only 37% of the English students felt this way. However, in the program, the French perceived they were less encouraged to express their ideas and differing opinions than English respondents (64%: 84%). In the area of task commitment, 67% of French students felt they always finished tasks they start, whereas a significantly different 31% of English students were this positive. It appeared that different beliefs about external reinforcement in education may be at work between the two cultures.

As a result of the Mini-Course Program, 64% of all students felt more confident of their abilities, and 66% perceived increased confidence in talking about more topics of interest. There was significant difference in gender and across the years in the latter statement. 75% of the females responded "True": 54% of males: 56% of 1980 - 1985: 76% of 1986 students responded "True".

Though 57% of the respondents perceived that the program did not make them more independent or determined, 72% perceived that they were more willing to risk new activities as a result of the program. 55% of all respondents perceived that the program had a positive effect on their sense of self-image. This response, though moderate, was consistent across time.

Parents

Comparing students' and parents' responses, few statements were found to be significantly different. 97% of the parents were satisfied with the opportunities provided for their children in the Mini-Course Enrichment Program. 100% of the parents were satisfied that the program was worthwhile.

Parents expressed significantly different responses in the following areas:

a) need for increased guidance and counselling (parents - 87%: students - 72%);

b) child's desire for more personal freedom to accomplish goals (51%: 76%);

c) recognition and appreciation given by family, friends and teachers (96%: 84%).

It appeared that parents were not aware of many of the specific details of the program, but across the years, parents recognized positive results from the program.

Implications

The Mini-Course Enrichment Program appears to be achieving its learning objectives. Students and parents perceive the program allows the students to pursue areas of interest, interact with like-ability peers, and further challenge themselves within a stimulating university environment.

Career aspirations were enhanced by exposure to new and advanced disciplines of knowledge. Personal views of the world and one's future in it were broadened. These benefits were perceived across the years as 88% of the respondents indicated that the program helped them to prepare for the future.

As a result of the program, improved sense of self-esteem, though moderate, occurred consistently across the years. Personal control and sense of independence were enhanced. Across the years the respondents still were confident in seeking new challenges and risking new discovery. It appeared that in these areas the Mini-Course Program was successful in enhancing self-image.

There seemed to be some cultural differences evident in the differing responses of English and French students. French students appeared to value scholastic activities and greater teacher direction, whereas English students tended to place greater value on affective growth, social interaction and independent studies. This difference may reflect cultural values and previous school backgrounds of the Francophone and Anglophone students. Future Mini-Course Programs may wish to address this apparent difference.

In addition, there appeared to be some difference in responses across the years, i.e., value of specific class activities, as well as gender differences of perceptions of time spent talking to teachers about areas of interest. Though female students perceived significant difference in the statement, "As a result of the Mini-Course Program I try more to understand differing ideas and peoples, (60%: 37%), yet they did not perceive teachers in the program spoke to them as often as to the male students (35%: 55%). Knowledge of these differing perceptions and limitations can help teachers revise their classroom interactions and teaching strategies.

Limitations

Due to the voluntary nature of the survey, results reflect the perceptions of a self-selected number of participants and their parents. The respondents may not be representative of all groups of high ability secondary students.

Future Directions

This study reinforces the literature on gifted behaviours. Participants in the program liked to study hard, work on challenging activities both inside and outside a classroom and try to do their best. To this end, we recommend that the program continue using a wide variety of strategies, investigative methods, student interaction, intradependent and stimulating challenges. Continued emphasis on self-directed learning should be a major goal.

For future programs, we strongly recommend the following areas be addressed:

1) for faculty instructors, provide in-service sessions on gifted behaviours and appropriate teaching strategies prior to the Mini-Course Program;

2) for students, provide personal counselling to help improve the individual's image of success and sense of achievement subsequent to his/her return to the high school setting;

3) provide personal experiences and/or counselling to help individuals prepare for future careers;

4) provide greater oportunities for affective growth through guided social interactions, i.e., structured leadership excercises, communication skills activities;

5) within the courses, provide participants with guided opportunities for self-directed learning;

6) inform schools and classroom teachers about the goals and demands of the program so that returning participants are not faced with unrealistic "catch-up" work. As one student pleaded: "Teachers expected the Mini-course students to have caught up by the first day back (at school) as if we had been doing nothing for the whole week."

Conclusion

Because of the cross section of years, students, and bilingual school systems, the results are generalizable to high ability students taking the Mini-course Programs. Their success is verified by the long-term effects described in the study. In conclusion, programs such as this are valuable. The study verifies that high ability students gain many personal benefits from working with selected university faculty within a milieu of similar ability peers.

Further research needs to address how universities could offer the participants follow-up programs, such as individual investigations with a faculty mentor. Long-term attention needs to be given to developing faculty centres for further enrichment programs for high ability students. Future provisions for these young people must include creative ways to help them delight in their differences.

OTTAWA/CARLETON BOARD OF EDUCATION

AIMS AND OBJECTIVES OF THE ENRICHMENT MINI-COURSE PROGRAM 1985

AIM:

To have the Boards of Education in Ottawa-Carleton region, Carleton University and the University of Ottawa collaborate to provide a series of approximately sixty-five Enrichment Mini-Courses for approximately 1,500 bright intermediate and senior division students (not including grade 13) from local schools during the week of May 13-17, 1985.

LEARNING OBJECTIVES:

1.1 to give the participating students the opportunity to pursue approximately 25 hours of advanced and/or new study in one course at one of the two post-secondary institutions during May 13-17, 1985;

1.2 to give the grades 8 to 12 participating students the opportunity to interact and learn in various cross-age groupings where appropriate;

1.3 to give students from different schools and school boards the opportunity to pursue studies in an area of individual interest;

1.4 to give an opportunity to each participating student to make a presentation (or lead a seminar) to a group of students at his/her own school upon his/her return from the Enrichment Mini-Course Program;

1.5 to give each participating student an opportunity to evaluate his/her experience on the Enrichment Mini-Course Program.

PROCEDURAL OBJECTIVES:

2.1 to determine the list of courses to be offered by January 14, 1985;

2.2 to determine the administrative matters (tuition fees, registration procedures, allocation of student places on the program) by January 14, 1985;

2.3 to provide a set of criteria to serve as a guideline to schools in the selection of students for this program;

2.4 to complete the registration of students by March 7, 1985;

2.5 to conduct a one-evening orientation program for the instructors during April, 1985;

2.6 to make available to instructors, Ministry of Education guidelines, Board curricula, course outlines, etc. as may be useful to assist them in identifying and planning appropriate Enrichment Mini-Courses;

2.7 to conduct an orientation program for the students who wil be attending these Enrichment Mini-Courses and their parents;

2.8 to evaluate the effectiveness of this program.

GENERAL OBJECTIVES:

3.1 to increase the level of awareness among educators of the special needs of bright students;

3.2 to increase the level of awareness in the community fo the special needs of bright students;

3.3 to increase the interest of the students on this program in pursuing further studies at their local post-secondary institutions.

ENRICHMENT MINI COURSES FOR INTERMEDIATE AND SENIOR STUDENTS

Would you like to spend one week at University?

Would you like to study one of Literature, Drama, Film, Music, Journalism, Sociology, A Second Language, Mathematics, Criminology, Law, Computer Science, Middle Eastern Religion and Politics, World Affairs..... at University for ONE WEEK IN MAY??

Here's your chance!

DATES: May 13 - 17, 1985

TIMES: 9:00 a.m. to 3:00 p.m. each day

COST: Tuition fee $45.00

For information about the courses and registration procedures consult your school principal

ENRICHMENT MINI-COURSES: IN-SCHOOL ORIENTATION

It is highly recommended by the Planning Committee that all schools with students accepted for Enrichment Mini-Courses hold an orientation meeting with their students before the courses begin.

Topics to be discussed with students would include:

1. The unique opportunity which the Enrichment Courses offer for learning in a post-secondary school environment.

2. The Schools Boards, Colleges and Universities have endeavoured to make the courses as interesting and as varied as possible.

3. It would be beneficial for students to do some preparation before the course; e.g. reading, discussion with parents and teachers.

4. Prior to the courses there will be an orientation meeting at the universities.

5. While attending courses, students have a duty to be punctual and attentive, and to conduct themselves in a manner which would be considered responsible by their principals, teachers and parents.

6. The teachers of the Enrichment Mini-Courses are appreciative of students who ask questions and share ideas. Suggestions for improvement and ideas for courses in future years are also welcomed.

7. The Enrichment Mini-Courses should take precedence over school assignments during the week of the courses.

8. A student who will be absent from Enrichment Mini-Course classes should inform his/her school and the university.

9. Participants in Enrichment Mini-Courses should be prepared to present a report on their experiences when they return to school.

10. The organizers of the Enrichment Mini-Course Programs, the course teachers and the schools hope that all students will find their courses an enjoyable and beneficial experience.

11. Transportation to and from the universities is the responsibility of the student.

The Committee involved in the preparation of the Enrichment Mini-Course intend that such an orientation meeting will develop enthusiasm and allow for discussion of concerns.

GUIDELINES FOR INSTRUCTORS OF ENRICHMENT MINI-COURSES

FOR HIGH SCHOOL STUDENTS

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1. Each week-long course should have a clearly identified central theme or topic around which all lectures, discussions, and field work will revolve. In choosing their topic, instructors should bear in mind that no uniform academic background of students can be assumed.

2. Instructors will be responsible for their groups throughout the week, and will often accompany them during the field work portions of their course.

3. Please remember that the attention span of students in this age group (grade 8 through 12) is somewhat limited. They are not able to sit still for as long as university students, and require frequent changes of perspective, activity, venue, etc.

4. We suggest that instructors break up each day into clear segments, consisting of morning lecture or discussion, subsequent reading periods or field work projects, lunch, labs or or practical workshops, etc. A student's day will be about six hours long and should have a clearly defined lunch hour. The students should not be permitted extended time without supervision.

5. As the aim of the planned courses is stimulation and enrichment, there should be no formal evaluation of students' performances during the week.

6. Class sizes have been limited to a maximum of 20 students in order to foster an informal, often spontaneous learning atmosphere, in which younger students may benefit from the insights of older students, and vice versa. It is hoped that classes will be very different in approach, structure, and subject matter from regular high school classes.

7. Instructors ae requested to bear in mind that many of their students may be bright under-achievers, who may need to be drawn out of their shells during the first day or so of the course. A project of this kind can be of considerable and lasting benefit to such students.

8. In order to provide for effective overall coordination of the project, instuctors are encourged to develop their courses in close consulation with the School of Continuing Education.